

Claims

- [c1] 1. A method for operating a washing machine in a rinse cycle, the washing machine including a rotatable basket and a water spraying device, aid method comprising:
rotating the basket at a first rate of rotation;
spraying a predetermined quantity of water into the basket while the basket is rotating at the first rate; and
rotating the basket at a second rate of rotation, the second rate of rotation greater than the first rate of rotation.
- [c2] 2. A method in accordance with Claim 1 wherein said spraying water into the basket comprises spraying fresh water into the basket.
- [c3] 3. A method in accordance with Claim 1 wherein said spraying water into the basket comprises pulsing the water into said basket.
- [c4] 4. A method in accordance with Claim 1 further comprising:
terminating said spraying before rotating the basket at the second rate of rotation; and
repeating rotating the basket at the first rate of rotation and spraying water into the basket while the basket is rotating at the first rate of rotation.
- [c5] 5. A method in accordance with Claim 1 wherein said rotating the basket comprises rotating the basket about a vertical axis.
- [c6] 6. A method in accordance with Claim 1 wherein the predetermined quantity of water is a function of a load type.
- [c7] 7. A method in accordance with wherein the predetermined quantity of water is a function of a load size.
- [c8] 8. A method in accordance with Claim 1 further comprising executing a deep fill rinse after rotating the basket at the second rate of rotation.
- [c9] 9. A method in accordance with Claim 1 wherein the washing machine includes a user selected rinse selector input, said method further comprising.

executing said rotating the basket at a first rate of rotation, spraying a predetermined quantity of water into the basket while the basket is rotating at the first rate, and rotating the basket at a second rate of rotation when a spray rinse cycle is selected; and
executing a deep fill rinse when a deep fill rinse cycle is selected.

- [c10] 10. A method for operating a washing machine in a rinse cycle, the washing machine including a rotatable basket drivingly engaged to a multi-speed drive system, and a spraying device, said method comprising:
driving the basket at a low speed;
spraying fresh water into the basket;
terminating spraying into the basket; and
driving the basket at a high speed.
- [c11] 11. A method in accordance with Claim 10 further comprising repeating driving the basket at a low speed, spraying fresh water into the basket, terminating spraying into the basket, and driving the basket at a high speed.
- [c12] 12. A method in accordance with Claim 11 wherein spraying fresh water comprises pulsing fresh water.
- [c13] 13. A method in accordance with Claim 11 wherein said driving the basket at high speed comprises driving the basket at high speed for a first period of time, said method further comprising driving the basket at the high speed for a second period of time, the second time period longer than the first time period.
- [c14] 14. A method in accordance with Claim 10 wherein said terminating spraying comprises terminating spraying after a predetermined amount of water has been sprayed.
- [c15] 15. A method for operating a washing machine in a rinse cycle, the washing machine including a rotatable clothes basket drivingly engaged to a multi-speed drive system, a spraying device, and a drain assembly, said method comprising:
rotating the basket at a low speed with the drive system;
spraying fresh water into the basket with the spraying device;

saturating clothes in the basket;
continuing to spray fresh water into the basket after the clothes are saturated until a predetermined quantity of water has been sprayed;
terminating spraying into the basket; and
rotating the basket at a high speed with the drive system.

[c16] 16. A method in accordance with Claim 15 wherein said spraying fresh water comprises pulsing fresh water.

[c17] 17. A method in accordance with Claim 15 further comprising repeatedly rotating the basket at low speed, spraying fresh water into the basket, saturating clothes in the basket, and rotating the basket at high speed.

[c18] 18. A washing machine comprising:
a tub;
a basket rotatably mounted within said tub;
a multi-speed drive system for rotating said basket at a first speed and a second speed greater than said first speed;
a spraying device configured to direct fresh water into said tub; and
a controller operatively coupled to said drive system and to said spraying device, said controller configured to operate said drive system to rotate said basket at the first speed while spraying water fresh into said basket, and to operate said drive system at the second speed after terminating said spraying.

[c19] 19. A washing machine in accordance with Claim 18, said controller further configured to pulse water through said spraying device.

[c20] 20. A washing machine in accordance with Claim 18 wherein said spraying device comprises a nozzle assembly.

[c21] 21. A washing machine comprising:
a rotatable basket;
a multi-speed drive system for rotating said basket at a first speed and a second speed greater than said first speed;
a spraying device configured to direct fresh water into said tub; and
a controller operatively coupled to said drive system and to said spraying

device, said controller adapted to repeatedly spin said basket at the first speed, spray fresh water into the basket while the basket is rotating at the first speed, and spin the basket at the second speed to extract water from the basket.

- [c22] 22. A washing machine in accordance with Claim 21 wherein said controller is configured to pulse said fresh water spray.
- [c23] 23. A washing machine in accordance with Claim 22 wherein said controller is configured to spray a predetermined quantity of water prior to spinning the basket at the second speed.
- [c24] 24. A washing machine comprising:
 - a rotatable basket;
 - a drive system operatively coupled to said basket for rotating said basket about a vertical axis;
 - a spray device configured to spray water into said basket; and
 - a controller operatively coupled to said drive system and to said spray device, said controller configured to rotate said basket at least at a first speed in a spin cycle and to rotate said basket at a second speed greater than the first speed in the rinse cycle, said controller further configured to spray a predetermined quantity of water each time the basket is rotated at the first speed.
- [c25] 25. A washing machine in accordance with Claim 24, said controller further configured to pulse fresh water through said spraying device.
- [c26] 26. A washing machine in accordance with Claim 25, said controller configured to adjust a spray time to deliver a specific volume of water.
- [c27] 27. A washing machine in accordance with Claim 26, said controller further configured to repeatedly spray fresh water into said basket.
- [c28] 28. A washing machine comprising:
 - a tub;
 - a basket rotatably mounted within said tub;
 - a multi-speed drive system for rotating said basket at a first speed and a second speed greater than said first speed;

a spraying device configured to direct fresh water into said tub; and
a controller operatively coupled to said drive system and to said spraying device
for execution of a spray rinse cycle during a wash cycle, said controller
configured to operate said drive system to rotate said basket at the first speed
while spraying water fresh into said basket and to operate said drive system at
the second speed after terminating said spraying when in the spray rinse cycle,
and wherein a number of spray rinse cycles in a wash cycle is a function of at
least one of a selected load type and a detected load type.

- [c29] 29. A washing machine comprising:
a tub;
a basket rotatably mounted within said tub;
a multi-speed drive system for rotating said basket at a first speed and a
second speed greater than said first speed;
a spraying device configured to direct fresh water into said tub; and
a controller operatively coupled to said drive system and to said spraying device
for execution of a spray rinse cycle, said controller configured to:
monitor an amount of time to fill said tub with a quantity of water, and
based upon said amount of time, to operate said spraying device to spray a
specific amount of water into said basket during said spray rinse cycle.